

SEQUENCE LISTING

<110> Sun, Yongming
Recipon, Herve
Ghosh, Malavika
Liu, Chenghua

<120> Compositions and Methods Relating to Colon Specific
Genes and Proteins

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<151> 2000-10-31

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<170> PatentIn Ver. 2.1

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ttcttnganc actgngnctt ttactggtc ccttaccctt accctgnata gttacattgg 240
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<213> Homo sapiens

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<222> (9)
<223> a, c, g or t

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<211> 398
<212> DNA
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<211> 523
<212> DNA
<213> Homo sapiens

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<223> a, c, g or t

<220>
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<223> a, c, g or t

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<213> Homo sapiens

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<211> 839
<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

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<211> 998
<212> DNA
<213> Homo sapiens

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<220>
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cttaaaaact acacatagaa acagggtaga atggtagtta tccaggctcn ggaggaagag 120
aaaacaannn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnngta tatggaaaat ttgctgagag 240
actagattt aqqtattcta cctcaattaa aaqgtaatt gt 282
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```
<210> 31  
<211> 1225  
<212> DNA  
<213> Homo sapiens
```

<400> 31
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aactccacca gaaaatggag gagagcgggt ttccaggaga caaagctgag atgagaagtg 240
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agtcaccagg aaatgtgatt tcctccttgt gaagatggtg atggccctaa gctgagattt 660
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aggataattt gaaaaaaagga cccagtgcta cccttagtcca cacacattga tgggagctct 1140
tcacatatta gtttttagaga atgtacataa ttgacccaaag caaagaacta aatcccgaaa 1200
tgcttcacqqa atttttaaaa qccaa 1225

<210> 32
<211> 844
<212> DNA
<213> Homo sapiens

<400> 32
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attgttcat catgcatac aagtttgata ttagctaa atttattttg cacacactag 120
aatttgtcct ggtttctag tacctaagg cagatatgca aaggtgttta ggagacatac 180
tctcagacaa accattatta tttaaaggaga tagaacaaaa caatcgctag ttaaggaaga 240
tgtttgtaa taattaaact tgtaattatt tgacttggaa tatttaatca ttttttggg 300
aaagaatgga tagattttgt taatgttagc actctaaaaa ttaaggactg gctttttcc 360
ccgtgtctcc catattctcc ttgtgtttga aacataaaac aaacactaaa cctaagcaaa 420
agttgctggg tttgtttca taatttgagggt gagttttcc ctcaactatt acaataaaag 480
aaaactttt atgattttaa tgataatgtt ttgtgttggg ttaaagaccc cctaacaaca 540
gggggtttt atacaacaac aagaagttt taaataattt agttttaaa gtggaaagca 600
gcagtaaatt aaactagaag gatatatttt atacctagaa ataaataaag ctcaacttgt 660
ttttaagcc tttttaaaaa atatthaatc atttaattt tgcaagtata gagttctcct 720
atggcaaaac tataccatca tcttctccaa ttgtcatgg cagctgtact aagttctgca 780
aaaacaagac atatggatgt gttcataacc ttctcagaat tggtatatca agacacattt 840
aaat 844

<210> 33
<211> 2483
<212> DNA
<213> Homo sapiens

<400> 33
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gcagttcaag caattctact gcctcagcct ctcaagtagc tggactata gacattcacc 180
accacaccca gctaattttt ttttttttta gaaaattttg tatatttaga aaaggttca 240
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ccaaagtgtt gggattacag gcctgagcca ctgtgcccag ccctcaagta actcttaaac 360
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ataaaagtcc ttcttctgac aaactttaag ttttttttgc atttccttc cttcccttcc 480
ctctggggagt tttttccctt agctgctcac ttcttattatc aacgaaatat tcccttccac 540
gccttttac ttatataccta caacatgctc agttctctt cttaacaaga aaatataagt 600
tttccaccaac ttatattatca aatttacatc cccctccctt tctacttccct tttgtaaaaa 660
aagagcattc aacctattgt ctgtctccat gcccacat tatcagtgc agcacccgca 720
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catttagatt aagccatttt tcacaagtt cttaaaattat ctcttccatt tctcagtata 840
accctttctt tcccttcaca gtttcttggaa ccaatctcac tagtcctca acgttcaattt 900
ccaaaggccac cccgaacaca tctttccctc ttccctaaat aaattctact ggattcttc 960
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```
<210> 34  
<211> 591  
<212> DNA  
<213> Homo sapiens
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<400> 34
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tctgcatgtc ctccctaggtt gggtaaagaa gggacaagg gaatggggaa acgttagagat 180
tcctggacta acagagaaaag acagcttgag aataaaaagta tgcaaaagat aatctacaac 240
aaaataatgc acttaactct tgttactaaa caaataagct acccacattt cagcttatct 300
gtatttgttt catgattttgt cagctatcta gcaactatct tagtcactga ttccggAACGA 360
cttagcagtgtt gttattgcattt agaacaactc cttacacaga gatttgcaag ctttctgaac 420
tttcgtactttt tcaaattgaa aatcaggaga aacatTTCA acggcttcat attcagacca 480
agatttagtat attaacaact aataacaata taaaaggta gaacaattcc tttcctctat 540
ctttctcagg acaaactcgatg gcttattaga aaacttaggaa gtatctgggtt g 591
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<210> 35  
<211> 306  
<212> DNA  
<213> Homo sapiens
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<400> 35
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agtaccagtt taacacataa aaagtgatca aggtgcaagg gacacagctt taaaatagtc 180
agacctggat ctgaatctgt gattctgtca tctgcaataa gtttctaact tctccaagcc 240
ttagttttt atctgtaaag gggagtatta actagagatg aggattaaat gaaaagtcac 300
ttactc 306

<210> 36
<211> 617
<212> DNA
<213> Homo sapiens

<400> 36
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tcttcattt tcactttctt ctttacactt gcaatccaga gtccagatgt aaaacagtgt 180
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ccaatgtttt caggtttttt actaggagca catgcatgaa tgttatata tgttatagc 480
tatgcaaaaa catgaacaga tgtatgcatttgtataatct aaaacacata aaggtacata 540
tactgacata ctgaaacaca tattatata accaaaaata aaaatttcat gagacagtat 600
taatgtttac cacatgc 617

<210> 37
<211> 725
<212> DNA
<213> Homo sapiens

<400> 37
ccaagactga gttagatttt ctattatgt a cccatggc aacagcattt tccacttaac 60
ttgttggaaa agggacaact gtcctctggg ggctctgtt ccaatattt tccactttc 120
tcttcattt tcactttctt ctttacactt gcaatccaga gtccagatgt aaaacagtgt 180
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gtgtccttgg gatggtaccc ttacccctga ggtgctaggg atggggccca gggctttcc 300
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ccaattgtttt caggtttttt tactaggagc acatgcatga atgtgttat atgtgttag 480
ctatgcaaaa acatgaacag atgtatgcattgtataatc taaaacacat aaaggtacat 540
atactgacat actgaaacac atattaat aacccaaaata aaaatttcat gagacagtat 600
taatgttaac cacatgctat atacttat tttctttca tttgcaaaag aatgctgtta 660
tgactgtcta aacctctggc ttgagaaaaaaa aaaaaaaaaaaa aaaaagatct ttaattaagc 720
gtgcc 725

<210> 38
<211> 90
<212> DNA
<213> Homo sapiens

<400> 38
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atggatatgt ttaaaaatttt tatatatattgg 90

<210> 39
<211> 222
<212> DNA
<213> Homo sapiens

<400> 39
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atcctgctac gtcagccatg agccacggtg cccagcctgg caggcttggg ttctcttaat 120
gcctctcctt ggcttgcaag atggccacct tctggctgtg tcctctctc catggccttt 180
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<210> 40
<211> 257
<212> DNA
<213> Homo sapiens

<400> 40
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caatgcttat aaaatattag agttgaaatg gactctctgt tcatgcagat gatgagaccg 120
aaacagagag cttccaggag gatcaatgcc attcaatgag cttgctgctg tactcccctc 180
tacacaatat gyatataatcc catcccagcc cgagactggc catactagtt cttagtaactg 240
aggctttcctt cctactt 257

<210> 41
<211> 263
<212> DNA
<213> Homo sapiens

<400> 41
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gctcatcaat gcttataaaa tattagaggtaaa gaaatggact ctctgttcat gcagatgatg 120
agaccgaaac agagagctc caggaggatc aatgccatc aatgagctt gctgtact 180
cccctctaca caatatggat atatccatc ccagccccgag actggccata cttagttcttag 240
taactgagggc tttcctccta ctt 263

<210> 42
<211> 533
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (501)
<223> a, c, g or t

<220>
<221> unsure
<222> (514)
<223> a, c, g or t

<220>
<221> unsure
<222> (528)
<223> a, c, g or t

<400> 42
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aaaaaaaaatc acagataagt actaaaaaca ctcaagattt gggatttaga tcattgatttag 120
atacaataga aagatcctgg aatcccgaca tgaggacaaa aatggtactg aattcttttt 180
gaaaaataga ttactgaaaa gcgatcta atagaacagt tgctttact tagatgttca 240
atgcataattt gttgtataat aaccaagtta ttacagttca gataaagggtt ccaaagtgtt 300
ttcgtttatga tataatactt tctattgtaa actggactaa agaaacgttg tatgttcaag 360
gaagtgttga gcagccatgg tgccctggg acatgctccc caggtgctga gagaggtgct 420
gcaggagtca cagacctgca ggcacgcact tgccagtgac tgggacgttg gctgggtggtt 480
ctctttgggt gtgatttagag ntatgtgagt tgtntcaata cttgagantg tcg 533

<210> 43
<211> 676
<212> DNA
<213> Homo sapiens

<400> 43
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aaaaaaaaatc acagataagt actaaaaaca ctcaagattt gggatttaga tcattgatttag 120
atacaataga aagatcctgg aatcccgaca tgaggacaaa aatggtactg aattcttttt 180
gaaaaataga ttactgaaaa gcgatcta atagaacagt tgctttact tagatgttca 240
atgcataattt gttgtataat aaccaagtta ttacagttca gataaagggtt ccaaagtgtt 300
ttcgtttatga tataatactt tctattgtaa actggactaa agaaacgttg tatgttcaag 360
gaagtgttga gcagccatgg tgccctggg acatgctccc caggtgctga gagaggtgct 420
gcaggagtca cagacctgca ggcacgcact tgccagtgac tgggacgttg gctgggtggtt 480
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acttacaatc atggtaaaag gcaaaggaaa agcagggttg tcccataatt ctgcggcct 600
ctctcaagcc ttcgagtggta tgctgtttca tatttcattcc agcctgggag ttggagacct 660
gagctgcatt acctaa 676

<210> 44
<211> 251
<212> DNA
<213> Homo sapiens

<400> 44
caggcctgct cagcaagatt ttcatggat tagtgaattt gtggttgcc aatgccataa 60
taatgcacca tgcagtagac ttgctgtaaa gcacagttc atcataacaa taactgtaaa 120
taatgctact gaacagctac agagcactcc tctgaactca ctggaatggg ctatatccca 180
tggcaagatg agtaagcctc aagcgaaaaa atctcaccct tggccctt ttttttggc 240
agaaaatcccc a 251

<210> 45
<211> 606
<212> DNA
<213> Homo sapiens

<400> 45
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acagctggtc cagcagggcg taacgcacatc acctagagag taaaatgaca acagttttc 120
ccttaagctca gcacttgcac agaaatctt tggaaagatc tcttcaaattt tctagaactc 180
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tgagtggcc agctgccttt ggttgcacca attaattttt agcctcccat taagacaggc 360
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tcccgaa 606

<210> 46
<211> 455
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (14)
<223> a, c, g or t

<220>

<221> unsure
<222> (16)
<223> a, c, g or t

<220>
<221> unsure
<222> (18)
<223> a, c, g or t

<400> 46
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acaagaata agattggca catagatggc agttccatct tctcacgtt tatgc当地 360
taagaagttc ctaatttact gatagcaatg tgaacccat gagaaacttt taaaagaaga 420
atgaagccat ctggtaagt atttaaaagt tcatt 455

<210> 47
<211> 367
<212> DNA
<213> Homo sapiens

<400> 47
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tgtgtgccaa gaatacagac agcccaggca gagggcattt ggtgctccag acacaaagt 180
aaggcccaggc ttcaaatacg gctggatcca ggcacacatc ctgaggttct gctggtctgg 240
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tggggca 367

<210> 48
<211> 249
<212> DNA
<213> Homo sapiens

<400> 48
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ggccctgcca gggaaataaa cttgggttag acaaaattct tggtaataag ctcataagg 180
ggacagactc ctgctccatt cttcccaccc ctcacaagg tttccaaattt agcggaaaaac 240
agtctaaat 249

<210> 49
<211> 436
<212> DNA
<213> Homo sapiens

<400> 49
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ccaacctaac tacttgccat ttcccaaata catcgtagcag tgccctgggt ctatcctgtg 180
gttcatgctg cttcctctgc ctgcaatatac cttccctgc aatagccctt tccacccagc 240
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gatgctgtag tcagatggag tgtctctcc tggggccca cagaccctgt acttccttct 360
gtgacagcaa caatcccaca gcagtggAAC tgcttacctg cctgagctcc tggagggcaa 420
ggatgccatg ttgctt 436

<210> 50
<211> 853
<212> DNA
<213> Homo sapiens

<400> 50
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gaagtctttt cacttcaat atgtgaagac ctaaattatg taattggatg aatgatattt 180
gtagagtcaa agagaatgtg agttctccgt cttatggta tagttattat gtaataatca 240
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gaggctcaga gaggaagtaa aataaagcat ggcccccc tactggtttca tataattcca 420
aagttattaa acacctggcc agcactgctg tgttaggtgt acactgcaca attgtgtccc 480
ttctaaggag tcagtgttca aatcacagac atcagagatt tattatgata attttctgg 540
cagatggcag taaagtagct tattctaaca aaatggaa tataaagact attttctaac 600
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gttatacatt ggtattgcag agtgatgcca tttacaagta atacatttga gttggcagat 840
ttcccaaggt ttc 853

<210> 51
<211> 383
<212> DNA
<213> Homo sapiens

<400> 51
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gagagaaaata gggaaagcagt gaaggttagat gtcatttctg tttttgttgg tggaaatacaa 120
ggtgttcttgc tgcttaaagg tcatgttctt gtgataaaac gcactgcaga gacaacatag 180

tttaattggc tgaggcaggt gactccctt aagcatcagg gtggaacaaa ctacacgaca 240
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attacatgag taaaacaatg agtgtcatgg tctgaattgt gttcccctcc ccaaaccgt 360
atgttcaagc cttaaaccct agt 383

<210> 52
<211> 3342
<212> DNA
<213> Homo sapiens

<400> 52
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gtttcttgcgt gcttaaagggt catgttcttg tgataaaaacg cactgcagag acaacatagt 180
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<211> 129
<212> DNA
<213> Homo sapiens

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tcaaatgga 129

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<211> 201
<212> DNA
<213> Homo sapiens

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<212> DNA

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<211> 221
<212> DNA
<213> Homo sapiens

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<211> 535
<212> DNA
<213> Homo sapiens

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<210> 61
<211> 514
<212> DNA
<213> Homo sapiens

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<210> 62
<211> 598
<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

<400> 55

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<210> 56

<211> 271

<212> DNA

<213> Homo sapiens

<400> 56

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<210> 57

<211> 573

<212> DNA

<213> Homo sapiens

<400> 57

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<210> 58

<211> 843

<212> DNA

<213> Homo sapiens

<400> 58

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<210> 64
<211> 601
<212> DNA
<213> Homo sapiens

<400> 64
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<210> 65
<211> 1216
<212> DNA
<213> Homo sapiens

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<223> a, c, g or t

<220>
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<222> (1204)
<223> a, c, g or t

<220>
<221> unsure
<222> (1206)
<223> a, c, g or t

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<210> 66  
<211> 1430  
<212> DNA  
<213> Homo sapiens
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<400> 66
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 <211> 430
 <212> DNA
 <213> Homo sapiens

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 <222> (72)..(139)
 <223> a, c, g or t

<400> 67
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 <211> 829
 <212> DNA
 <213> Homo sapiens

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 <222> (240)..(354)
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<210> 69
<211> 541
<212> DNA
<213> Homo sapiens

<400> 69
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a 541

<210> 70
<211> 696
<212> DNA
<213> Homo sapiens

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gctcagaggg gttgtgtggg aagtgagaga aggggt 696

<210> 71
<211> 1207
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (957)
<223> a, c, g or t

<400> 71

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cagctggag tgagcagtca gagagggaga cagccttgcc cggtgctacc cagcaagcta 180
gtcaccgagt gggcagaggg aggagcggcc ctcaccggat gtcaagcagc ctgggtcccc 240
agtccagctc tgcctgtccc tcgcaataac gcctcagtga cgaccatttgc tgagccatct 300
ctctgtctca ggcacggtgc tacatgccaa cgaaacctgc tcccattgaa ccctggccag 360
ccagtgaaga aagggttggg cctgggaggt gccactttac agacaggggc accaaggggc 420
agggtggcag gaggcccacc ggacgttccc catgaagtag cagtcggcagc atccacaccc 480
agcaggcacc acgctggccc gcagcctccc tgccagcagc cctggcttcc cggcctcgga 540
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aagtccccag gggctgaggg gaccgtggcg gcagggtggca cccagagcag cactctcctg 720
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gcccggcagc aggccggcctc cggaggacac gatgtgactg gctgccgta cgtcgcactc 1020
agatgagtct gcccggatc gacctgctgc cgagtccctgc cggacaggca caggcaggga 1080
gtaaaaattt tttttttttt aataactgaa tgaaaataaa cattgggtt 1140
ttgacaata actacatatt ttcaaaccctt gccagttccag gggatgcagt ttccaggtgc 1200
gttatgc 1207

<210> 72

<211> 263

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (231)

<223> a, c, g or t

<220>

<221> unsure

<222> (239)

<223> a, c, g or t

<220>

<221> unsure

<222> (242)

<223> a, c, g or t

<220>

<221> unsure

<222> (248)

<223> a, c, g or t

<220>

<221> unsure

<222> (259)

<223> a, c, g or t

<400> 72

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cattttactt tacctgtcta cagtgtttg cgcaattgac cactccttcc ttttgaagt 120
attttcttcc cttggtttct gaaatactgt tatcttccta tctcaactggc catacattct 180
agtctccttt gctagtttat tatggtttgc atcttctcaa caacaatttt nttttttng 240
gnggagangg agtcttgcna tgt 263

<210> 73

<211> 579

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (547)

<223> a, c, g or t

<220>

<221> unsure

<222> (555)

<223> a, c, g or t

<220>

<221> unsure

<222> (558)

<223> a, c, g or t

<220>

<221> unsure

<222> (564)

<223> a, c, g or t

<220>

<221> unsure

<222> (575)

<223> a, c, g or t

<400> 73

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gtaaatgcag acaaagtgg aattgaagct gccgaaatgc tattagcaaa tcttagacat 180
gggtgtactg tggatgagta tctgcaagac caggtaatga cacatttagg taaaaaacc 240
tctaacctgt tagatttcaa tatgtggtag attgaatatac aattttaaaata attgacttc 300
agacactaat tagcaagtcc tacttcaata attttaaaaaa atattctggg atttgcattc 360
ctcaaatttc agccctcatt ttactttacc tgtctacagt gttttgcgca attgaccact 420
ccttcctttt tgaagtattt tcttccttg gtttctgaaa tactgttatac ttcttatctc 480
actggccata cattctagtc tccttgcta gtttattatg gtttcatct tctcaacaac 540
aattttnttt ttttnggngg aganggagtc ttgcnatgt 579

<210> 74
<211> 339
<212> DNA
<213> Homo sapiens

<400> 74
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cctgaaagc tggaaagagc ttaacaata tcagctgtt ccatgaaaga atatttgctt 120
actttccatt gtgtataaga taacgataat catagaatta atattatca acttccttgt 180
gtctttgca catttcgtt cagtcctgtt tttgtttgtt actgtcatc tcaaagtact 240
caagttgaat tttgtcactt tggatttctt ccagaatat gtgagagaca tttaggtctc 300
taatgatgaa gtattttcta ggcgtaatgc aaaagattg 339

<210> 75
<211> 299
<212> DNA
<213> Homo sapiens

<400> 75
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ggtaacttcg tttccacctc cccttatata ttgttcttcc ttccctctta aattctctaa 120
atctctgctt atacagagca atctggctct ctctggctc tccagtcattc atacatcata 180
ctcacattca ccatctttag aagtgcagta agccacataa atgcagcaga agtaccttat 240
gcagtcctag gaggctgtgg ttttgagttt ctttttttt tcttttgga gacggagcc 299

<210> 76
<211> 247
<212> DNA
<213> Homo sapiens

<400> 76
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gtttaatcct cattacaatt ctgtggtaaa tgctattatc tgttttata ttgaagggat 120
gaaatggagg ctcagaggga tatgttagtag ctaaatgtta gagctaggat tganacccaa 180
attgacttct gagtatagat ttccccccaa ctgtatgata cttcatattt ggagtca 240
tgaagta 247

<210> 77
<211> 254
<212> DNA
<213> *Homo sapiens*

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<400> 77
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tgaaatggag gctcagaggg atatgttagta gctaaatgtt agagcttagga ttgaaaaccca 180
aattgacttc tgagtataga tttcccccca actgtatgat acttcataatt tggagtcagc 240
ttqaagtaat tcac 254
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<210> 78  
<211> 504  
<212> DNA  
<213> Homo sapiens
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<400> 78
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acaatactaa gaattccatt ctttagagac aaattactta gaagttgata gtgacatatt 120
gaaagggttg ttgattgttg gattattcag gtgatgaaga tggatggtagggccatggcg 180
gctgaggag aatgagtctt aaacactgag gaggcacaaaa agattgggtg gctggatata 240
ataggaaact ggaacgaaag aaggagaaga gaatggcgat actgataaaaa aatagaatga 300
aagaagatgt gtggaaaaga aagtttcaact ttgaaggctt gatTTTgaa gtgatggcag 360
atatacatat acatccaata gatgagtggg aaaagtaat caaacagaaaa tgaaaaattt 420
agtccaaagat tgatgggaga ctaataatgg ggaggactga gcctggggc aactacatta 480
gtaacagtgg caggTTTgtt tttt 504

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<210> 79  
<211> 210  
<212> DNA  
<213> Homo sapiens
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<220>
<221> unsure
<222> (80)..(99)
<223> a, c, g or t

<220>
<221> unsure
<222> (173)
<223> a, c, g or t

<220>

<221> unsure
<222> (175)
<223> a, c, g or t

<220>
<221> unsure
<222> (206)
<223> a, c, g or t

<400> 79
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gtctttacat ggcgttcccnn nnnnnnnnnnnnnnc aaatttcctc ttttcataag 120
gaccgtggta ttggataggg gtccacccta ctgcgatatg accttatTTT aantncatct 180
ttgatgaccc tgTTTccacg taaggncaca 210

<210> 80
<211> 161
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (116)
<223> a, c, g or t

<220>
<221> unsure
<222> (148)
<223> a, c, g or t

<400> 80
gagggtcaga agcagaaaaga tgacatcata agaaagactc aactggccat tttggcttt 60
gaagggtggaa aggggacctg agtccaggca tgtggcagc ctggagaagg cgaganaatg 120
gattttcccc cagaatccct ggaaagggnac gtggccctaa c 161

<210> 81
<211> 112
<212> DNA
<213> Homo sapiens

<400> 81
tagcaccttt taataactct ttttagagta atttagagca aactagataa atttaatat 60
atatctcatt gcatactttt atgtaacttt gtcttagaaa aacaagagtt ct 112

<210> 82

<211> 277
<212> DNA
<213> Homo sapiens

<400> 82
tgaaatgatg acaccagtag aatatggtga gatatgtata cacaatgtaa tacctagagt 60
gacaatttaa aaacctatac aaagagtgc acataaataa acaaaaacaa cataaaaata 120
aaaatataat tctaaaaata ttcaagtagc caattggaag gtggaaaaaa gaaaaagaac 180
aaaaaataga acagcactaa acaaaaaata aaatcgaga cctaggccct gacatatcaa 240
taatttatatt aacatgtaaa tggtctaaat tttacca 277

<210> 83
<211> 637
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (92)..(196)
<223> a, c, g or t

<220>
<221> unsure
<222> (230)..(316)
<223> a, c, g or t

<220>
<221> unsure
<222> (367)..(428)
<223> a, c, g or t

<400> 83
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nnnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 180
nnnnnnnnnnnn nnnnnncact ttctttctgt aggctctagg agagaatcta gnnnnnnnnn 240
nnnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 300
nnnnnnnnnnnn nnnnnnccaa gtccttctca cactgctgtc ttttgggttc tctctcttgc 360
ctgcctnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 420
nnnnnnncat agttgattag cagccttaat ccacatgtaa tttaattcc ctttgccag 480
gtaatgtggc cattatcttgc cctacaacct cagaggatgt tgataatgt aagggttagt 540
aattggggag ttcataggggt ttgatagttg acaaatacag agtgttagtat taggttaggg 600
tttttggca gggtgcaagtg gcccataacct gtaatgt 637

<210> 84
<211> 577

<212> DNA

<213> Homo sapiens

<400> 84

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tggagaaaaa ttaataatc ctggcagggc tacattcaac ataattctgt tatggggaa 120
ggcagcatgc tttggctgct cagttagcta tgttctgtac aaccaagtga aattgctaaa 180
aaaagattct cctgtataca gtaacttaaa gtatgcagt ctacttaaga tcagatctga 240
gttacaaaat caaaagtgc agctcctatg ttctttaaa gtccaatctc ttttttcat 300
tgttgctc caaatgcctt gaggatctga tgttagatgt gtggctaata aatattggtt 360
gaatttcctg aacgaatctg ttatgaaaag atctactttg ctcatctcg tgccccata 420
gcaggagctt gaggagaagg agaaaatatt gggtcagagc ttttgattaa tatgtatgtat 480
tctattaaac gggttcacta aacaaaaaaaaa ggcaaggaaa acagttaaac caagagtctt 540
gaggttcaag tcttgtatg attaaatcat catccta 577

<210> 85

<211> 687

<212> DNA

<213> Homo sapiens

<400> 85

ttcccatgtt agccagggtt ggtcttgcac tctgaacctc agggtatcac cccccccttgg 60
gctcagggtt catggctgat attacaggca taagccacca cacctagcca agaaaccatt 120
cttgaacac aagcaaataat actttggaga aaaatttaat aatcctggca gggctacatt 180
caacataatt ctgttatggg ggaaggcagc atgcttggc tgctcagtgta gctatgttct 240
gtacaaccaa gtgaaattgc taaaaaaaaa ttctcctgtt tacagtaact taaagtgtatg 300
cagttctactt aagatcagat ctgagttaca aaatcaaaag tgacagctcc tatgttcttt 360
taaagtccaa tctcttttt tcattgttgc gctccaaatg ccttgagttac ctgatgtaga 420
gttaggtggct aataaaatatt ggttgaattt cttgaacgaa tctgttatgtaa aagatctac 480
tttgctcattc tctgtgcccc aatagcagga gcttgaggag aaggagaaaa tattgggtca 540
gagcttttga ttaatatgtt tgattctatt aaacgggttc actaaaccaa aaaaggcaaa 600
ggaaaaacagt taaaccaaga gttcttgagg ttaaagtctt gtatgtatgtt aaatcatcat 660
ccttaagatgtt tgatgacata aactttc 687

<210> 86

<211> 77

<212> DNA

<213> Homo sapiens

<400> 86

tgtcgtttta caactgtcgt gactggtgaa aaccctgtgc gttaccctaa cttaatctgc 60
cttgcatttca catcccc 77

<210> 87

<211> 575

<212> DNA

<213> Homo sapiens

<400> 87

cacacacgtg cacacacaat actcacttaa caaacattta atttattgaa catttattat 60
atgccaaagc tggtataaga caccaaaaga gtaagacaga aagtattctt ccctggagct 120
ttgtctgact ttccaagctt tattaggcat caaacaac tgaagtgcctt tttaagattc 180
aagtctccta cgtcgtctaa ggcagagtaa gtgcctca gtactatatt ttactcta 240
tttttttaa cacaatggca gtactataag tatgaaactt tggtataaat gtcagattct 300
agattgtgct cctgcttct gcacactcta atattttaa acatctcgaa aatacagagt 360
ggcagcaaaa ttacctgtaa aaacatacta gctcaagagt ttgacaggct caaaataat 420
taccttaaat acattaaaca agaagtgtat ttgttataaca gtatgtactg accaaaatta 480
aagtgcaggt tgtacagaaa gagctgcttg tgttattta tgagcaaaa gaaaagctaa 540
tttggtacat ttaaaaatca gcatctagca aattc 575

<210> 88

<211> 663

<212> DNA

<213> Homo sapiens

<400> 88

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gcccccacccct actcccagca tatgcacaca cacacgtgca cacacaatac tcacttaaca 120
aacatttaat ttattgaaca ttatttatat gccaaagctg gtataagaca caaaaagagt 180
aagacagaaa gtattctcc ctggagctt gtctgactt ccaagctta ttaggcatca 240
aacaAAAactg aagtgcTTT taagattcaa gtctcctacg tcgtctaagg cagagtaagt 300
agcCTTCAGT actatatttt actctaattt ttttttaaca caatggcagt actataagta 360
tgaaactttg gtataaatgt cagattctag atttgctcc tgctttctgc acactcta 420
atttttaaac atctcgaaaa tacagagtgg cagaaaaatt acctgtaaaa acataactgc 480
tcaagagttt gacaggctca aaataaatta ccttaaatac attaaacaag aagtgtattt 540
gttatacagt atgtactgac caaaattaaa gtgcaggTTG tacagaaaga gctgcttGTG 600
ttatTTATG agcaaaaatga aaagctaatt tggtacattt aaaaatcagc atctagcaaa 660
ttc 663

<210> 89

<211> 80

<212> DNA

<213> Homo sapiens

<400> 89

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ttaaaaatac tgtataactaa 80

<210> 90

<211> 496

<212> DNA

<213> Homo sapiens

<400> 90

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ccaggatggc cgtgatctcc tgacctcggt atccgctgcc ttggctcccc aaagtgcctgg 120
aattacaagc gtgacgcact gtcggccagct tagtatacag tatttttaac aagaattata 180
gtaaaatatt atttgaatag aggcttggtt tctgaaacac catccaatct gaaagtagaa 240
gaaaaaggct ggggtgtggtg gctcatgcct gtaaccccag cactttggga agctgaggcg 300
ggcgatccc ttgagctcag tttgagacca ggctggccaa ctccatctt accaaaaaat 360
acaaaaatga gccaggcatg gtgggttaca cctgtggtcc cagcggctct gggggctgag 420
gtgggaggaa ggcttggcc taggaggtgg aggttgcagt gagccaggat tgcactg 480
ccgatagagc cagata 496

<210> 91

<211> 385

<212> DNA

<213> Homo sapiens

<400> 91

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agcctttata gatttgcattt gatcctaata catataagca ttcattttat tcattattaa 180
ttacttcata gattcagtgt gtgacgaagg gagatgattt ttaacaaata ataaagtggaa 240
atgatctagt tttgctatgt tgnttgagca acatcaaata gttttgcata aatagataat 300
ttatagtgat tttttttca ctatggattt ttcttaata tattaaggc ttcatcttcc 360
tgataccacc tagtttaatt ggggg 385

<210> 92

<211> 500

<212> DNA

<213> Homo sapiens

<400> 92

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agcctttata gatttgcattt gatcctaata catataagca ttcattttat tcattattaa 180
ttacttcata gattcagtgt gtgacgaagg gagatgattt ttaacaaata ataaagtggaa 240
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ttatagtgat ttttttttc actatggat tttcttaata atattaagtgc ttttcattt 360
tctgatacca cctagttaa ttgggggtga atatcagaga aattagaatg ttatccagc 420
tgaaggagta cagttttttt tttctcttct tagagaatat agtgcctcag atacagtcca 480
caacaaaaat tttggtttag 500

<210> 93

<211> 364
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (19)
<223> a, c, g or t

<220>
<221> unsure
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<223> a, c, g or t

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<223> a, c, g or t

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<220>
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<223> a, c, g or t

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<223> a, c, g or t

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nnatattaat nagatgtatc aaactgtnc ac aatatgtgaa gagtattgtg tatatacaa 180
cagaaacaa ttgaaagcct tcaacatgtg tgggtgggg gagagataac tgaattaaca 240
ggccatgttag taaaacttaa aatcaaatcc agtagtcttg aaggtatagt aattgtttag 300
tttgaaggt atagtaatta agtactgcgc actaaaaaaa actgacccaaa aggccgggtg 360
cggt 364

<210> 94
<211> 1646
<212> DNA
<213> Homo sapiens

<400> 94
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acaggcaccn ctggcaaa cccacatgga tnnntnanaaa tggagaatga ggagacagcc 120
nnatattaat nagatgtatc aaactgtnc ac aatatgtgaa gagtattgtg tatatacaa 180
cagaaacaa ttgaaagcct tcaacatgtg tgggtgggg gagagataac tgaattaaca 240
ggccatgttag taaaacttaa aatcaaatcc agtagtcttg aaggtatagt aattgtttag 300
tttgaaggt atagtaatta agtactgcgc actaaaaaaa actgacccaaa aggccgggtg 360
cggtggctca cgccctgtaat cccagcactt tgggaggccg aggccggccg atcacctgag 420
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aaaatttagcc gggcatggtg gctcacgcct gtaatcccag cactctggga ggccaagaac 540
atgctgatgg tttatgccac aagttgacaa ctgtgtgtcc aactgtgaaa cctcagactc 600
aaggtcttagc aaaagatgct tgggaaatcc ctcgagaatc tttgcgacta gaggttaaac 660
taggacaagg atgttcggc gaagtgtgga tggaaacatg gaatggaacc acgaaagtag 720
caatcaaaaac actaaaacca ggtacaatga tgccagaagc tttccttcaa gaagctcaga 780
taatgaaaaa attaagacat gataaaacttg ttccactata tgctgttgt tctgaagaac 840
caatttacat tgtcaactgaa tttatgtcaa aaggtgctt tttcccttctt attcgtgatt 900
ggatgagat aaggggtgac aatgtgaaaac actacaaaat taggaaaactt gacaatggtg 960

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gatactatat cacaaccaga gcacaatttg atactctgca gaaattggtg aaacactaca 1020
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agactcaagg tctagaaaaa gatgcttggg aaatccctcg agaatcttg cgactagagg 1140
ttaaaacttagg acaaggatgt ttcggcgaag tgtggatggg aacatggaat ggaaccacg 1200
aagtagcaat caaaacacta aaaccaggta caatgatgcc agaagcttc cttcaagaag 1260
ctcagataat gaaaaaatta agacatgata aacttgttcc actatatgct gttgttctg 1320
aagaaccaat ttacattgtc actgaattta tgtcaaaga gctccacaga cgctgcacag 1380
ctgtgaactc aactccagcc ctcagggaaag gcagctcgca aagacctagg gcagcccc 1440
gatttcccaa aaagagcact gagaacctag caagcgttt tctatatgat gctggcggca 1500
gcccagttag ggaagtgcaa caagtatggt tctcctgct gtcaactgtg gaaacagcga 1560
ccctgaaagt ggaggagcca cagctggaaat cgtgttcgtc tgaatacacg cacctttcct 1620
atgagccttg taaagccagt cgttga 1646

<210> 95
<211> 415
<212> DNA
<213> *Homo sapiens*

<220>
<221> unsure
<222> (109)..(170)
<223> a, c, q or t

<220>
<221> unsure
<222> (323)
<223> a, c, q or t

<220>
<221> unsure
<222> (325)
<223> a, c, g or t

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<400> 95
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nnnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnngtgcata 180
atggagattt taatagtagc catctcataa ggtggttgca aaggtaaat gtgttaatat 240
gcatgatgca catagaacaa tgcctagcac atagtagaga tacataatca ctactatata 300
ctggtaccag tananggtca ggtcttatgg acctaaggc atataactta gtctcttcca 360
aaggatcttca aatqattttct caaaaacaqa qaataaaaaq aaaaacgtt atgaa 415
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<210> 96
<211> 504
<212> DNA
<213> Homo sapiens

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<220>
<221> unsure
<222> (212)..(231)
<223> a, c, g or t

<400> 96
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tgttagatt ttggactgc aactgcttc ctctgcccc gaaatgtttt gcctctctt 180
ttcctacaag ttaaatgttc taaatataaaa gnnnnnnnnn nnnnnnnnnn naattcta 240
gtgaaaggca ctagctgtct aataggttt atgtatcatt actattacta tatgtatctt 300
aatgttagtct atgttaggttt ttatcagaaa gtgtacctt ctatggttt ttatctata 360
ttctggggcc ttttatctca gatataaacc atgaacagta atgatagtcc ctgacatata 420
aatcttagta aaaaagtgatt aaaaatctaa aactcagttt gaaaaacata tcttgtagc 480
ataaaataaaa accttttatt qttt 504
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<210> 97
<211> 516
<212> DNA
<213> *Homo sapiens*

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<400> 97
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caatggattt gttttggata tataattagt tcatttgctg tttagaagcc ttgccaaag 120
tgttagatt ttggactgc aactgcttc ctcttgccca gaaatgttt gcctcttctt 180
ttcctacaag ttaaatgttc taaatataaa ggggtatgtg tgtgtgtgtg taattcta 240
gtgaaaggca ctagctgtct aataggttc atgtatcatt actattacta tatgtatctt 300
aatgttagtct atgttaggtt ttatcagaaa gtgtacctt ctatggttt ttatTTATA 360
ttctggggcc ttttatctca gatataaaacc atgaacagta atgatagtcc ctgacatata 420
aatcttagta aaaagtgatt aaaaatctaa aactcgatgat gaaaaacata tcttgttagc 480
ataaaataaa accttttatt qttttttttt aaaaaaa 516
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<210> 98
<211> 400
<212> DNA
<213> *Homo sapiens*

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<400> 98
aattagatct ttccctgcaat aaggatctag gtggagggtt tgaagactcg ccggctcagt 60
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acgtgtatgtc actgaccccag gtcattcctt tactttcaaa tcttcaagaa ttggatttat 180
cagccaacaa aaagatgggc agttcttctg aaaacttact cagcaggctc cgattttac 240
cagcattgaa gtcatttagtt atcaacaact gtgctttgga gagtgagact tttacagctc 300
ttgctgaagc ctctgttcac ctctctgctc tggaagtatt caacccttct tgggaacaaag 360
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<210> 99
<211> 2352
<212> DNA
<213> Homo sapiens

<400> 99
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gaaagcaaca ggaagatgtc ttattggaa ctaccccat caacttcacc atgagtcaaa 120
caaggaagaa aacttcctca gaaggagaaa ctaagcccc aacttcaact gtcaacaaat 180
ttctcagggg ctccaatgtc gaaagcagaa aagaggacaa tgaccttaaa acaagtgatt 240
cccaacccag cgactggata cagaagacag ccacctcaga gactgctaag cctctcagtt 300
cagaaatgga atggagatcc agtatggaga aaaatgagca tttcctgcag aagctggca 360
aaaaggctgt caacaagtgt cttagattga ataactgtgg attaacaaca gcggacatga 420
aagaaatggg agaagcattt gagatgattc ctgaacttga agagctaaat ttgtcttgg 480
acagtaaagt gggaggaat ttgcctctga tccttcagaa gttccaaaaa gggagcaaga 540
tacaaatgtat tgagctgtg gcttgctccc tcacgtcaga agatggaca tttctgggtc 600
aactgctacc tatgctgcaa agtctcgaag tacttgatct ttccattaac agagacattt 660
ttggcagtctt gaacagtatt gctcaggat taaaaagcac ctcaaatctg aaagtactga 720
agttacattc atgtggatta tcacaaaaga gtgtcaaaat attggatgtc gcttttaggt 780
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gctcactaac agcagatgac gtgatgtcac tgaccaggat cattcctta ctttcaaatac 960
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gcaggctccg attttacca gcattgaagt cattagttt caacaactgt gctttggaga 1080
gtgagacttt tacagctt gctgaagcct ctgttcaccc ctctgctctg gaagtattca 1140
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gctacaatga cagcatctgt gatgcggggtt ggaccatgtt ctgccaaaac gtgcgggttcc 1380
tcaaagagct aatcgagctg gatattagcc ttcgaccatc aaattttcga gattgtggac 1440
aatggtttag acacttgtt tatgctgtga ccaagcttcc tcagatcaact gagataggaa 1500
tgaaaagatg gattctccca gtttcacagg aggaagaact agaatgttt gaccaagata 1560
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ctaagctaca aaccattctc caaaggaaaaa gaacatgaac gaattccaga gtcatgaact 1680
gaatttcaac ttctggccca tttatggga cttatattac aagagctttg taaatatata 1740
tatatatattat atatatatacata tatatacaca tatataataat atacatatat 1800
aatacacata tatatgtaaa tatatatata atatctaata tgagcatgcc attattctct 1860
gtctatgaaa caaaaatggc atttttcaat ggatttgggg tggatataataat tagttcat 1920
ttgctgttta gaagccttgc caaaaagtgtt tagattttgg tactgcaact gcttcctct 1980
tgcccagaaaa tgtttgcct cttctttcc tacaagttaa atgttctaaa tataaagggg 2040
tatgtgtgtg tgtgtgtat tctaatgtga aaggcactag ctgtctaata gtttcatgt 2100
tcattactat tactatatgt atcttaatgt agtctatgtt ggttttatac agaaaagtgt 2160
cctttctatg gtttattatt ttatattctg gtgccttta tctcagatataa accatgaa 2220
cagtaatgtat agtcactgac atataaatct tagaaaaaag tgattaaaaa tctaaaactc 2280
agtatgaaaa acatatctt gttttttttttaaaaacctt ttattgttta aaaaattgtt 2340
aaaaaaaaaa aa 2352

<210> 100
<211> 565
<212> DNA
<213> Homo sapiens

<400> 100
attttatttgg aacacaggct tgacagaatc ttctttctt ctttagaaatc ctagaaaaca 60
gaaagcaaca ggaagatgtc ttattggaa ctaccccat caacttcacc atgagtcaaa 120
caaggaagaa aacttcctca gaaggagaaa ctaagcccc gacttcaact gtcaacaaat 180
ttctcagggg ctccaatgct gaaagcagaa aagaggacaa tgaccttaaa acaagtgatt 240
cccaacccag cgactggata cagaagacag ccacctcaga gactgctaag cctctcagtt 300
cagaaatgga atggagatcc agtatggaga aaaatgagca tttcctgcag aagctggca 360
aaaaggctgt caacaagtgt ctagatttga ataactgtgg attaacaaca gcggacatga 420
aagaaatggt tgccttgctg cctttctcc cagacttgga agaactggat attcctgga 480
atggttgta ggtggAACCC tccttccat cactcagcaa atgcatctgg tcagcaagtt 540
aaaaatcttg aggctggta gctgc 565

<210> 101
<211> 13
<212> PRT
<213> Homo sapiens

<400> 101
Met Leu Leu His Asp Ile Asp Trp His Leu Met Ser Ile
1 5 10

<210> 102
<211> 14
<212> PRT
<213> Homo sapiens

<400> 102
Met Val Leu Pro Gly Ser Leu Ser Met Leu Thr Tyr Gly Met
1 5 10

<210> 103
<211> 23
<212> PRT
<213> Homo sapiens

<400> 103
Met Gln Val Leu Tyr Trp Thr Tyr Leu Leu Leu Ile Leu Phe Pro Thr
1 5 10 15

Phe Thr Cys Leu Phe Ile Phe
20

<210> 104
<211> 26
<212> PRT
<213> Homo sapiens

<400> 104
Met Asn Leu Tyr Met Asn Leu Pro Ser Ala Val Arg Phe Ser Arg Ala
1 5 10 15

Thr Pro Leu Ile Ser Leu Phe Leu Ala Leu
20 25

<210> 105
<211> 49
<212> PRT
<213> Homo sapiens

<400> 105
Met Thr Thr Lys Lys Gln Glu Glu Cys Glu Ser Leu Lys Asp Lys Gln
1 5 10 15

Lys Ala Thr Lys Gln Ser Ile Ser Phe Cys Ile Tyr Ile Ile Lys Val
20 25 30

Lys Phe Ser Thr Leu Ala Thr Asp Tyr Lys Ser Val Pro Ser Gly Cys
35 40 45

Cys

<210> 106
<211> 61
<212> PRT
<213> Homo sapiens

<400> 106
Met Pro Ser Pro Ser Ala Pro Ser Ile Val Pro Val Leu His Gly Cys
1 5 10 15

Trp Val His Ile Cys Gln Ala Asp Val Tyr His Thr Leu Leu Lys Gly
20 25 30

Phe Lys Ser Val Phe Glu Thr Glu Ser His Val Val Ser Pro Arg Leu
35 40 45

Glu Cys Asn Gln Ser Lys Thr Pro Leu Lys Lys Asn Lys
50 55 60

<210> 107
<211> 34
<212> PRT
<213> Homo sapiens

<400> 107
Met Glu Leu Val Met Glu Trp Lys Leu Thr Ile Cys Ser Pro Lys Cys
1 5 10 15

Ala Thr Thr Thr Gln Gly Leu Gln Thr Asp Ser Tyr Leu Asp Val Val
20 25 30

Glu Ser

<210> 108
<211> 77
<212> PRT
<213> Homo sapiens

<400> 108
Met Val Asn Pro Ala Gln Glu Met Thr Leu Ser Arg Asn Thr Cys Lys
1 5 10 15

Tyr Lys Lys Gln Asp Ile Leu Pro Gln Leu Arg Ser Asp Lys Ile Thr
20 25 30

Leu Gly Lys Leu Gln Gly Gln Cys Ala Ser Lys Thr Lys Ser Leu Val
35 40 45

Ser Ser Leu Thr Ser Tyr Leu Pro Ala Phe Ile Ile Ile Ser Leu Ser
50 55 60

Val Thr Gln Tyr Leu Val Asn Phe Leu Phe Trp His Thr
65 70 75

<210> 109
<211> 59

<212> PRT

<213> Homo sapiens

<400> 109

Met Gln Cys Lys His Phe Phe Leu Thr Tyr Leu Thr Asp Gln Gly Gly
1 5 10 15

Gln Val Ala Leu Leu Ser Ser Phe Pro Pro Cys Gly Asp Ser Gly Ile
20 25 30

Gln Ala His Ser Ile Thr Arg Leu Ser His Ile Gly Val Phe His Phe
35 40 45

Gly Asp Glu Asp Glu Gly Glu Ser Gly Arg Glu
50 55

<210> 110

<211> 91

<212> PRT

<213> Homo sapiens

<400> 110

Met Asp Val Met Gly Lys Leu Lys Gly Ser Cys Asp Glu Thr Gly Ser
1 5 10 15

Glu Asn Ser Asp Gly Asp Leu Ser Lys Val Ile Leu Pro Lys His His
20 25 30

Leu Ala Ile Met Ile Pro Pro Asn Leu Ser Gln Phe Val Tyr Phe Ile
35 40 45

Ser Arg Gly Ser Phe Ser Val Leu Ala Ser Cys Val Phe Val Phe Phe
50 55 60

Phe Phe Ser Val Ile Leu Gln Ala Gln Asp Phe Leu Leu Asp Thr Gly
65 70 75 80

Arg Ile Ser Leu Leu Lys Glu Ala Gly Gly Thr
85 90

<210> 111

<211> 45

<212> PRT

<213> Homo sapiens

<400> 111

Met Gly His Val Asp Gln Leu Ser Pro Arg Thr Thr Asn Leu Ala Cys
1 5 10 15

Ser Asp Asp Leu Cys Ser Arg Gln Gly Phe Arg Leu Asp Cys Cys Ser
20 25 30

Ser Leu Trp Arg His Asn Pro Asn Cys Glu Leu Leu Asn
35 40 45

<210> 112

<211> 64

<212> PRT

<213> Homo sapiens

<400> 112

Met Leu Lys Met Ile Leu Ala Ser Ile Val Ile Asn Ser Val Ile Pro
1 5 10 15

Glu Phe Phe Val Ser Pro Arg His Thr Asn Phe Cys Pro Leu Leu Leu
20 25 30

Phe Ser Gln Ser Phe Leu Leu Ala Phe Leu Ser Asn Arg Val Leu Leu
35 40 45

Thr Pro Tyr Ile Pro Phe Trp Leu Val Arg Val Ser Phe Ser Ser Ser
50 55 60

<210> 113

<211> 25

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (14)

<220>

<221> UNSURE

<222> (17)

<400> 113

Met Leu Leu Phe Thr Lys Leu Leu Ile Ile Met Val Ile Xaa Ile Asn
1 5 10 15

Xaa Asn Asn Lys Leu Leu Gln Leu Phe
20 25

<210> 114
<211> 57
<212> PRT
<213> Homo sapiens

<400> 114
Met Arg Ile Gln Asn Leu Thr Cys Leu Leu Gly Ser Lys Glu Met
1 5 10 15

Ser Thr Ser Ser Pro Leu Thr Pro Asn Gly Val Glu Gly Phe Gly Pro
20 25 30

Gln His Cys Val Thr Tyr Ser His His Asp Phe Leu Ala Gln Val Thr
35 40 45

Pro Ser Val Lys Trp Lys Arg Glu Glu
50 55

<210> 115
<211> 147
<212> PRT
<213> Homo sapiens

<400> 115
Met Asn Glu Ser Trp Ala Gly Pro Gly Pro Ala Glu Arg Ala Glu Glu
1 5 10 15

Ala Val Ser Gly Val Gly Val Glu Ala Lys Thr Gln His Ala Gly Gln
20 25 30

Gly Ala Gln Pro Gly Gly Met Gly Cys Gly Phe Ser Ser Gly Pro Ile
35 40 45

Gly Met Ala Leu Gly Leu Gly Leu Val Gly Thr Ala Ala Thr Arg Gly
50 55 60

Gly Ser Ser Ala Trp Pro Asp Ser Thr Cys Asn Val Gly Arg Gln Trp
65 70 75 80

Ala Pro Pro Gly Gly Arg Asn Thr Val Arg Ser Met Gln Arg Ala Gly
85 90 95

Asp His Gly Ala Cys Asp Leu Arg Ala His Pro Gly Gln Thr Trp Val
100 105 110

Arg Gly Gly Leu Gly Arg Gln Asp Ser Glu Gly Leu Gln Gly Val Phe
115 120 125

Val Leu Cys Pro Tyr Thr Gly Asp Leu His Gly Arg Val Arg Ser Ile
130 135 140

Arg Met Leu
145

<210> 116
<211> 73
<212> PRT
<213> Homo sapiens

<400> 116
Met Thr Ile Ser Leu Cys Ala Thr Asn Leu Pro Arg Ala Ala Thr Val
1 5 10 15

Leu Arg Met Lys Pro Lys Leu Pro Gly Ser Gly Pro Val Gln His Glu
20 25 30

Pro His Leu Pro Ser Gln Pro Gln His Pro Leu Leu Phe Phe Gln Ala
35 40 45

Gly Gly Lys Leu Glu Ala His Pro His Phe Thr Gln Thr Leu Gly Ile
50 55 60

Pro Ile Ser Gly Asn Arg Gly Val Phe
65 70

<210> 117
<211> 48
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (46)

<400> 117
Met Tyr Asn Ile Leu Lys Ala Phe Asp Lys Ile Val His Ile Ile Ser
1 5 10 15

Asn Thr Ile Leu Tyr Tyr Gln Gln His Lys Ala Asn Val Ser Lys
20 25 30

Asn Ser Arg Leu Arg Ile Ser Lys Asn Ser Pro Arg Ala Xaa Phe Arg
35 40 45

<210> 118

<211> 38

<212> PRT

<213> Homo sapiens

<400> 118

Met Leu Pro Val Ser Pro Thr Leu Lys Glu Arg Asn Gln Arg Arg Met
1 5 10 15

Leu Leu Lys Ser Thr His Leu Ala Ser Val Ser Ser Ala Ser Cys Thr
20 25 30

Gln Thr Lys His Thr Gly

35

<210> 119

<211> 55

<212> PRT

<213> Homo sapiens

<400> 119

Met Lys Ile Phe Ile Ile Leu Ser Pro Leu Cys Gly Ile Leu Leu
1 5 10 15

Asn Val Leu Glu Ser Leu Lys Phe Ile Phe Lys Cys Glu Ser Leu Leu
20 25 30

Phe Val Trp Gly Glu Glu Cys Gln Val Gly Ile Met Asn Gln Ala Leu
35 40 45

Pro Tyr Gln Val Leu Leu Tyr
50 55

<210> 120

<211> 92

<212> PRT

<213> Homo sapiens

<400> 120
Glu Ser His Thr Leu Gln Val Ile Leu Gly Cys Glu Met Gln Glu Asp
1 5 10 15

Asn Ser Thr Glu Gly Tyr Trp Lys Tyr Gly Tyr Asp Gly Gln Asp His
20 25 30

Leu Glu Phe Cys Pro Asp Thr Leu Asp Trp Arg Ala Ala Glu Pro Arg
35 40 45

Ala Trp Pro Thr Lys Leu Glu Trp Glu Arg His Lys Ile Arg Ala Arg
50 55 60

Gln Asn Arg Ala Tyr Leu Glu Arg Asp Cys Pro Ala Gln Leu Gln Gln
65 70 75 80

Leu Leu Glu Leu Gly Arg Gly Val Leu Asp Gln Gln
85 90

<210> 121

<211> 85

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (51)...(72)

<400> 121
Met Ile Lys Val Ser Leu Thr Ser Ala Pro Lys Val Ser Ser Leu Glu
1 5 10 15

Gly Thr Asn Arg Arg Glu His Ser Asp Thr Gln Gly Pro Leu Ser Val
20 25 30

Pro Trp Lys Pro Ser Asp Leu Cys Arg Pro Ile Ser Val Arg Lys Trp
35 40 45

Val Ala Xaa
50 55 60

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg Thr Thr Gln Ser Ser Trp Gln
65 70 75 80

Ile Leu Asn Lys Gly

<210> 122
<211> 20
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (15)

<400> 122
Met Gly Gly Ala Trp Ser Ile Ala Gly Pro Leu Thr Gly Phe Xaa Phe
1 5 10 15
Arg Leu Thr Phe
20

<210> 123
<211> 103
<212> PRT
<213> Homo sapiens

<400> 123
Phe Tyr Phe Leu Phe Ser Phe Val Leu Arg Trp Ser Phe Thr Leu Val
1 5 10 15

Thr Gln Ala Gly Val Gln Trp Cys Asp Leu Gly Ser Leu Gln Pro Pro
20 25 30

Pro Pro Arg Leu Lys Ala Phe Ser Cys Leu Gly Leu Pro Ser Ser Trp
35 40 45

Asp Tyr Arg His Ala Leu Gln Arg Pro Ala Asn Phe Ala Phe Leu Val
50 55 60

Glu Ile Gly Phe His His Val Gly Gln Ala Gly Pro Gln Leu Leu Thr
65 70 75 80

Ser Gly Asp Pro Ser Ile Leu Ala Ser Gln Ser Ala Gly Ile Thr Gly
85 90 95

Val Thr Ala Val Pro Gly Pro
100

<210> 124
<211> 48
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (13) .. (43)

<400> 124
Met Val Val Ile Gln Ala Xaa Glu Glu Glu Lys Thr Xaa Xaa Xaa Xaa
1 5 10 15

Xaa
20 25 30

Xaa Ile Trp Lys Ile Cys
35 40 45

<210> 125
<211> 95
<212> PRT
<213> Homo sapiens

<400> 125
Met Ser Ser Tyr Met Ile Asn Lys Phe Leu Pro Ile Lys Lys Val Lys
1 5 10 15

Ile Pro Gly His Lys Val Phe Ser Thr Asp Ile Met Phe Leu Lys Phe
20 25 30

Val Ser Ile Ala Thr Leu Leu Arg Arg His Thr Asp Ile Ser Glu Asp
35 40 45

Leu Arg Val Leu Gln Asn Thr Glu Lys Ile Ser Arg Arg Lys Gly Lys
50 55 60

Gly Glu Thr Lys Lys Leu Lys Glu Gly Leu Thr Tyr Lys Trp Asn Asp
65 70 75 80

Leu Lys Arg Asn Gly Glu Pro Gly Glu Thr Gly Val Ser Gln Ser
85 90 95

<210> 126
<211> 48
<212> PRT
<213> Homo sapiens

<400> 126
Met Ile Lys Tyr Phe Lys Ser Asn Asn Tyr Lys Phe Asn Tyr Tyr Lys
1 5 10 15

Thr Ser Ser Leu Thr Ser Asp Cys Phe Val Leu Ser Phe Lys Ile Ile
20 25 30

Met Val Cys Leu Arg Val Cys Leu Leu Asn Thr Phe Ala Tyr Leu Pro
35 40 45

<210> 127
<211> 98
<212> PRT
<213> Homo sapiens

<400> 127
Met Glu Phe Arg Ser Val Ala Gln Val Gly Val Gln Trp Arg Asp Leu
1 5 10 15

Gly Leu Leu Gln Pro Leu Pro Leu Gln Phe Lys Gln Phe Tyr Cys Leu
20 25 30

Ser Leu Ser Ser Ser Trp Asp Tyr Arg His Ser Pro Pro His Pro Ala
35 40 45

Asn Phe Leu Tyr Phe Ala Lys Ile Leu Tyr Ile Ala Lys Arg Phe His
50 55 60

His Val Gly Gln Ala Gly Leu Ala Leu Leu Thr Ser Gly Asp Pro Pro
65 70 75 80

Thr Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Leu Ser His Cys Ala
85 90 95

Gln Pro

<210> 128

<211> 50
<212> PRT
<213> Homo sapiens

<400> 128
Met Gly Lys Arg Arg Asp Ser Trp Thr Asn Arg Glu Arg Gln Leu Glu
1 5 10 15

Asn Lys Ser Met Gln Lys Ile Ile Tyr Asn Lys Ile Met His Leu Thr
20 25 30

Leu Val Thr Lys Gln Ile Ser Tyr Pro His Phe Ser Leu Ser Val Phe
35 40 45

Val Ser
50

<210> 129
<211> 16
<212> PRT
<213> Homo sapiens

<400> 129
Met Leu Leu Phe Val Leu Ser Leu Val Phe Gln Tyr Gln Phe Asn Thr
1 5 10 15

<210> 130
<211> 54
<212> PRT
<213> Homo sapiens

<400> 130
Met Ala Leu His Cys Phe Thr Ser Gly Leu Trp Ile Ala Ser Val Arg
1 5 10 15

Lys Lys Val Lys Met Lys Glu Lys Val Glu Gln Ile Leu Ala Thr Glu
20 25 30

Pro Pro Glu Asp Ser Cys Pro Phe Ser Asn Lys Leu Ser Gly Lys Cys
35 40 45

Cys Cys His Gly Ser Thr
50

<210> 131

<211> 41
<212> PRT
<213> Homo sapiens

<400> 131
Met Cys Ala His Lys Gly Lys Ala Met Arg Glu Arg Thr Gln Pro Glu
1 5 10 15

Gly Gly His Leu Ala Ser Gln Gly Glu Ala Leu Arg Glu Thr Lys Pro
20 25 30

Ala Arg Leu Gly Thr Val Ala His Gly
35 40

<210> 132
<211> 35
<212> PRT
<213> Homo sapiens

<400> 132
Met Ala Leu Ile Leu Leu Glu Ala Leu Cys Phe Gly Leu Ile Ile Cys
1 5 10 15

Met Asn Arg Glu Ser Ile Ser Thr Leu Ile Phe Tyr Lys His Trp Met
20 25 30

Ser Ile Leu
35

<210> 133
<211> 58
<212> PRT
<213> Homo sapiens

<400> 133
Met Phe Asn Ala Tyr Leu Leu Tyr Asn Asn Gln Val Ile Thr Val Gln
1 5 10 15

Ile Lys Gly Pro Lys Cys Phe Arg Tyr Asp Ile Ile Leu Ser Ile Val
20 25 30

Asn Trp Thr Lys Glu Thr Leu Tyr Val Gln Gly Ser Val Glu Gln Pro
35 40 45

Trp Cys Ser Trp Asp Met Leu Pro Arg Cys
50 55

<210> 134
<211> 27
<212> PRT
<213> Homo sapiens

<400> 134
Met Met Lys Leu Cys Phe Thr Ala Ser Leu Leu His Gly Ala Leu Leu
1 5 10 15

Trp His Leu Ala Thr Thr Asn Ser Leu Ile Pro
20 25

<210> 135
<211> 46
<212> PRT
<213> Homo sapiens

<400> 135
Met Glu Leu Pro Ser Met Cys Pro Ile Leu Phe Phe Val Thr Val Phe
1 5 10 15

Phe Met Tyr His Thr Pro Ser Cys Pro Ser Ser Val Pro Gln Thr His
20 25 30

Gln Ser His Phe Leu Leu Thr Ala Leu Gly Leu Ala Leu Thr
35 40 45

<210> 136
<211> 77
<212> PRT
<213> Homo sapiens

<400> 136
Met Thr Cys Pro Gly Gly Glu Thr Gly Trp Gly Cys Leu Arg Met Asp
1 5 10 15

Pro Arg Glu Trp Val Ser Ser Pro Asp Gln Gln Asn Leu Arg Met Cys
20 25 30

Ala Trp Ile Gln Pro His Leu Lys Leu Gly Leu His Phe Val Ser Gly
35 40 45

Ala Pro Asn Ala Leu Cys Leu Gly Cys Leu Tyr Ser Trp His Thr Gly
50 55 60

Glu Ala Leu Ser Pro Ala Gly Pro Gly Cys Cys Cys Ser
65 70 75

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<210> 137  
<211> 37  
<212> PRT  
<213> Homo sapiens
```

<400> 137
Met Glu Gln Glu Ser Val Pro Ser Met Ser Leu Phe Thr Arg Ile Leu
1 5 10 15

Ser Gln Pro Ser Leu Phe Pro Trp Gln Ala Leu His Arg Glu Thr Gly
20 25 30

Lys Arg Ser Thr Val
35

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<210> 138  
<211> 59  
<212> PRT  
<213> Homo sapiens
```

<400> 138
Met Leu Leu Pro Leu Pro Ala Ile Ser Phe Pro Cys Asn Ser Leu Phe
1 5 10 15

His Pro Ala Asp Ala Ser Ser Leu Ser Trp Leu Ser Ser Lys Ser Tyr
20 25 30

Pro Leu Gly Lys Leu Thr Arg Met Leu Gln Ser Asp Gly Val Ser Pro
35 40 45

Pro Gly Pro Pro Gln Thr Leu Tyr Phe Leu Leu
50 55

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<210> 139  
<211> 50  
<212> PRT  
<213> Homo sapiens
```

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<400> 139
Met Asp Asn Lys Cys Leu Thr Leu Thr Asn Tyr Leu Ala Ile Met Gly
          1           5           10          15

```

Phe Phe Asp Gln Lys Ser Ser Lys Arg Val Trp Trp Gly Leu Arg Asp
20 25 30

Pro Ser Ser Leu Pro Lys Asn Met Lys Ser Phe His Phe Gln Tyr Val
35 40 45

Lys Thr
50

<210> 140

<211> 72

<212> PRT

<213> Homo sapiens

<400> 140

Met Arg Val Val Phe Lys Ile Thr Phe Cys Arg Val Val Cys Ser Thr
1 5 10 15

Leu Met Leu Lys Gly Ser His Leu Pro Gln Pro Ile Lys Leu Cys Cys
20 25 30

Leu Cys Ser Ala Phe Tyr His Lys Asn Met Thr Phe Lys His Lys Asn
35 40 45

Thr Leu Tyr Ser Thr Thr Lys Asn Arg Asn Asp Ile Tyr Leu His Cys
50 55 60

Phe Pro Ile Ser Leu His Leu Tyr
65 70

<210> 141

<211> 863

<212> PRT

<213> Homo sapiens

<400> 141

Met Pro Glu Gln His Lys Asp Pro Arg Val Gln Glu Asn Pro Asp Asp
1 5 10 15

Gln Arg Thr Val Pro Glu Val Thr Gly Asp Ala Arg Ser Ala Phe Trp
20 25 30

Pro Leu Arg Asp Asn Gly Gly Pro Ser Pro Phe Val Pro Arg Pro Gly
35 40 45

Pro Leu Gln Thr Asp Leu His Ala Gln Ser Ser Glu Ile Arg Tyr Asn
50 55 60

His Thr Ser Gln Thr Ser Trp Thr Ser Ser Ser Thr Lys Arg Asn Ala
65 70 75 80

Ile Ser Ser Ser Tyr Ser Ser Thr Gly Gly Leu Pro Gly Leu Lys Gln
85 90 95

Arg Arg Gly Pro Ala Ser Ser Arg Cys Gln Leu Thr Leu Ser Tyr Ser
100 105 110

Lys Thr Val Ser Glu Asp Arg Pro Gln Ala Val Ser Ser Gly His Thr
115 120 125

Arg Cys Glu Lys Gly Ala Asp Thr Ser Pro Gly Gln Thr Ile Ala Pro
130 135 140

Thr Gly Gly Ser Pro Arg Ser His Asp Ser Arg Pro Arg Arg Arg Lys
145 150 155 160

Ile Pro Leu Leu Pro Arg Arg Arg Gly Glu Pro Leu Met Leu Pro Pro
165 170 175

Pro Leu Glu Leu Gly Tyr Arg Val Thr Ala Glu Asp Leu His Leu Glu
180 185 190

Lys Glu Thr Ala Phe Gln Arg Ile Asn Ser Ala Leu His Val Glu Asp
195 200 205

Lys Ala Ile Pro Asp Cys Arg Pro Ser Arg Pro Ser His Thr Leu Ser
210 215 220

Ser Leu Ala Thr Gly Ala Ser Gly Gly Pro Pro Val Ser Lys Ala Pro
225 230 235 240

Thr Met Asp Ala Gln Gln Asp Arg Pro Lys Ser Gln Asp Cys Leu Gly
245 250 255

Leu Val Ala Pro Leu Ala Ser Ala Ala Glu Val Pro Ala Thr Ala Pro
260 265 270

Val Ser Gly Lys Lys His Arg Pro Pro Gly Pro Leu Phe Ser Ser Ser
275 280 285

Asp Pro Leu Pro Ala Asn Ser Ser His Ser Arg Asp Ser Ala Gln Val
290 295 300

Thr Ser Met Ile Pro Ala Pro Phe Thr Ala Ala Ser Arg Asp Ala Gly
305 310 315 320

Met Arg Arg Thr Arg Ser Ala Pro Ala Ala Ala Ala Ala Pro Pro
325 330 335

Pro Ser Thr Leu Asn Pro Thr Ser Gly Ser Leu Leu Asn Ala Val Asp
340 345 350

Gly Gly Pro Ser His Phe Leu Ala Ser Ala Thr Ala Ala Ala Arg Ala
355 360 365

Gln Arg Ser Glu Val Arg Tyr Asn Gln Arg Ser Gln Thr Ser Arg Thr
370 375 380

Arg Ser Cys Leu Lys Arg Asn Ala Ser Ser Ser Ser His Ser Ser Thr
385 390 395 400

Glu Gly Leu Gln Glu Val Lys Arg Arg Arg Gly Pro Ala Ser Ser His
405 410 415

Cys Gln Leu Ala His Ser Ser Asn Thr Val Ser Glu Asp Gly Pro
420 425 430

Gln Ala Val Ser Ser Gly His Arg Cys Glu Asn Lys Ala Gly Thr Ala
435 440 445

Pro Gly Gln Thr Leu Ala Pro Arg Gly Ser Pro Arg Ser Gln Ala
450 455 460

Ser Arg Pro His Ile Asn Thr Ala Leu His Val Glu Asp Lys Ala Ile
465 470 475 480

Ser Asp Cys Arg Pro Ser Arg Pro Ser His Thr Leu Ser Ser Leu Ala
485 490 495

Thr Gly Ala Ser Gly Gly Pro Pro Val Ser Lys Ala Pro Thr Met Asp
500 505 510

Ala Gln Gln Asp Arg Pro Lys Ser Gln Asp Ser Leu Gly Leu Leu Ala
515 520 525

Pro Leu Ala Ser Ala Ala Glu Val Pro Ser Thr Ala Pro Val Ser Gly
530 535 540

Lys Lys His Arg Pro Pro Gly Pro Leu Phe Ser Ser Ser Asp Pro Leu
545 550 555 560

Pro Ala Thr Ser Tyr His Ser Arg Asp Thr Ala Gln Val Thr Ser Leu
565 570 575

Ile Pro Ala Thr Phe Thr Ala Ala Ser Arg Asp Ala Gly Met Arg Arg
580 585 590

Thr Arg Ser Ala Pro Ala Ala Thr Ala Ala Pro Pro Pro Ser Thr
595 600 605

Leu Asn Asn Thr Ser Gly Ser Leu Leu Asn Ala Val Asp Gly Gly Pro
610 615 620

Ser His Phe Leu Ala Ser Ala Thr Ala Ala Arg Ala Gln Arg Ser
625 630 635 640

Glu Val Arg Tyr Asn Gln Arg Ser Gln Thr Ser Arg Thr Arg Ser Cys
645 650 655

Leu Lys Arg Asn Ala Ser Ser Ser Ser Ser His Ser Ser Thr Glu
660 665 670

Gly Leu Gln Glu Val Lys Arg Arg Arg Gly Pro Ala Ser Ser His Cys
675 680 685

Gln Leu Ala His Ser Ser Asn Thr Val Ser Glu Asp Gly Pro Gln
690 695 700

Ala Val Ser Ser Gly His Arg Cys Glu Asn Lys Ala Gly Thr Ala Pro
705 710 715 720

Gly Gln Thr Leu Ala Pro Arg Gly Gly Ser Pro Arg Ser Gln Ala Ser
725 730 735

Arg Pro His Ile Asn Ser Ala Leu His Val Glu Asp Lys Ala Ile Ser
740 745 750

Asp Cys Arg Pro Ser Arg Pro Ser His Thr Leu Ser Ser Leu Ala Thr
755 760 765

Gly Ala Ser Gly Gly Pro Pro Val Ser Lys Ala Pro Thr Met Asp Ala
770 775 780

Gln Gln Asp Arg Pro Lys Ser Gln Asp Cys Leu Gly Leu Leu Ala Pro
785 790 795 800

Leu Ala Ser Ala Ala Glu Val Phe Ser Thr Ala Pro Val Ser Gly Lys
805 810 815

Lys His Arg Pro Pro Gly Pro Leu Phe Ser Ser Ser Asp Pro Leu Pro
820 825 830

Ala Thr Ser Ser His Ser Gly Asp Ser Ala Gln Asp Thr Ser Leu Ile
835 840 845

Pro Ala Pro Phe Thr Pro Ala Ser Arg Asp Ala Gly Ile Arg Arg
850 855 860

<210> 142

<211> 29

<212> PRT

<213> Homo sapiens

<400> 142

Met Ser Tyr Leu Ser Leu Leu Leu Ile Ser Ile Phe Met Val Cys Tyr
1 5 10 15

Phe Lys Arg Asn Ser Phe Pro Ile Thr Ile Leu Phe Ser
20 25

<210> 143

<211> 32

<212> PRT

<213> Homo sapiens

<400> 143

Met Pro Trp Pro Met Pro Ile Cys Thr Gly Thr Gln Gly Val Leu Thr
1 5 10 15

His Arg Gln Gly Pro Pro Pro Ala Ala Val Gly Val Ser Pro His Thr
20 25 30

<210> 144

<211> 29

<212> PRT

<213> Homo sapiens

<400> 144

Met Asn Ala Phe Leu Leu Glu Arg Met Thr Glu Ser Gln Ala Met Asp
1 5 10 15

Ile Gln Thr Cys Ile Phe Gln Thr Leu Leu Glu Asn Lys

20

25

<210> 145

<211> 48

<212> PRT

<213> Homo sapiens

<400> 145

Met Ile Val Thr Asn Thr Ile Leu Lys Phe Ile His Lys Lys Pro Thr
1 5 10 15

Thr Ile Thr Pro Thr Lys Gln His Gly Ile Ile Phe Ser Val Pro Glu
20 25 30

Ala Lys Val Arg Ala Leu Leu Cys Phe Leu Leu Arg Met Pro Ser Pro
35 40 45

<210> 146

<211> 55

<212> PRT

<213> Homo sapiens

<400> 146

Gly Gln Ala Leu Trp Leu Met Pro Val Ile Pro Val Val Ala Lys Ala
1 5 10 15

Glu Gly Lys Asp His Leu Arg Pro Gly Val Ala Asn Gln Pro Gly Gln
20 25 30

His Ser Lys Thr Leu Phe Leu Gln Lys Lys Asn Phe Ala Lys Leu Ala
35 40 45

Glu His Gly Gly Ala Cys Leu

50

55

<210> 147

<211> 55

<212> PRT

<213> Homo sapiens

<400> 147

Met Ser Arg Phe Arg Ile Gln Thr Ser Glu Thr Ala Pro Ile Pro Leu
1 5 10 15

Val Ser His Pro His Thr Pro Leu Ser Asn Asn Asn Asn Leu His Leu
20 25 30

Gly Asn Val Cys Tyr Val Pro Gly His Thr Gly Ile Ile Ser Cys Thr
35 40 45

Pro His Arg His Leu Ile Lys
50 55

<210> 148
<211> 50
<212> PRT
<213> Homo sapiens

<400> 148
Met Gln Gly Leu His Leu Pro Gln Gly Leu Gly Thr Cys Tyr Ser Ile
1 5 10 15

Cys Leu Gln Cys Leu Ser Pro His Gly Tyr Phe Phe Val Ala Val Gly
20 25 30

Leu Ser Ser Asn Val Met Ser Pro Thr Ser Leu Pro Lys Ala Val Leu
35 40 45

Pro Thr
50

<210> 149
<211> 31
<212> PRT
<213> Homo sapiens

<400> 149
Met Leu Pro Val Asn Ile Ser His Pro Leu Ser Arg Gly Asn Pro Leu
1 5 10 15

Leu Ser Ser Lys Phe Ser Lys Phe Phe Leu Ile Glu Phe Ser Gln
20 25 30

<210> 150
<211> 36
<212> PRT

<213> Homo sapiens

<400> 150

Met Asp Tyr Ser Leu Ser Phe Asp Asn Tyr Thr Trp Gly Phe Gly Glu
1 5 10 15

Pro Arg Ile Lys Val Gln Ser Phe Asn Asp Leu Leu Ala Pro Gly Leu
20 25 30

Thr Gln Glu His
35

<210> 151

<211> 85

<212> PRT

<213> Homo sapiens

<400> 151

Met Ile Arg Ser Lys Gly Thr Asn Phe Gln Ile Leu Ala Glu Leu Phe
1 5 10 15

Lys Gly Met Asp Phe Leu Trp Leu Gln Leu Ala Arg Leu Phe Gln Lys
20 25 30

Ala Cys Pro Trp Leu Thr Ala Cys Leu Ala Gln Phe Leu Arg Ser Pro
35 40 45

Leu Val Met Glu Asn Arg Ala Asp Arg Ile Gln Met Ala Arg Phe His
50 55 60

Arg Gly Gln Gly Gly Pro Gln Ser Ala Asn Gln Gly Arg Leu Arg Pro
65 70 75 80

Glu Lys Gly Ile Ser
85

<210> 152

<211> 73

<212> PRT

<213> Homo sapiens

<400> 152

Met Asp Arg Phe Leu Asn Ser Lys Ala Arg Arg Leu Gly Ser Cys Ser
1 5 10 15

His Pro Ala Phe Tyr Leu Leu Cys Val Pro Asp Glu Asp Thr Ser Cys

20

25

30

Ser Thr Met Tyr Leu Pro Leu Lys Arg Arg Ala Asp Pro Asp Gln Leu
35 40 45

Phe Ser Asp Leu Leu Gly Gly Thr Gln Arg Leu Trp Arg Leu Trp Pro
50 55 60

Ser Leu Ala Ser Val Glu Ser Gly Leu
65 70

<210> 153

<211> 63

<212> PRT

<213> Homo sapiens

<400> 153

Met Gln Cys Thr Xaa
1 5 10 15

Xaa
20 25 30

Xaa Lys Ile Lys Phe Gly
35 40 45

Met Lys Gln Glu Leu Ser Trp Thr Ile Tyr Asn Leu Leu Arg Tyr
50 55 60

<210> 154

<211> 46

<212> PRT

<213> Homo sapiens

<400> 154

Met Arg Cys Leu Leu Ala Asp Ser Ser Leu Gln Met Gln Pro Gly Asp
1 5 10 15

Val Thr Leu Arg Leu Glu Ser Cys Gly Ser Asn Pro Arg Gln Arg Gln
20 25 30

Leu His Gln Val Leu Val Trp Val Arg Asn Arg Gly Lys Gly
35 40 45

<210> 155

<211> 72
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (22)

<400> 155
Met Pro Pro Arg Gly Trp Ala Cys Pro Ser Ser Gly Pro Pro Ala Pro
1 5 10 15

Gly Pro Gly Arg Trp Xaa Arg Ala Ala Ala Gly Gly Leu Arg Arg Thr
20 25 30

Arg Cys Asp Trp Leu Pro Leu Arg Arg Thr Gln Met Ser Leu Arg Arg
35 40 45

Ile Asp Leu Leu Pro Ser Pro Ala Gly Gln Ala Gln Ala Gly Ser Glu
50 55 60

Asn Tyr Leu Pro Leu Phe Ile Ser
65 70

<210> 156
<211> 20
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (10)

<220>
<221> UNSURE
<222> (13)...(14)

<220>
<221> UNSURE
<222> (16)

<220>
<221> UNSURE
<222> (20)

<400> 156
Met Val Phe Ile Phe Ser Thr Thr Ile Xaa Phe Phe Xaa Xaa Glu Xaa

1

5

10

15

Glu Ser Cys Xaa

20

<210> 157

<211> 66

<212> PRT

<213> Homo sapiens

<400> 157

Met Ser Leu Thr Tyr Ser Trp Lys Lys Ser Lys Val Thr Lys Phe Asn
1 5 10 15

Leu Ser Thr Leu Arg Met Thr Val Thr Asn Lys Asn Arg Thr Val Gln
20 25 30

Lys Cys Ala Lys Asp Thr Arg Lys Leu Asn Asn Ile Asn Ser Met Ile
35 40 45

Ile Val Ile Leu Tyr Thr Met Glu Ser Lys Gln Ile Phe Phe His Gly
50 55 60

Asn Ser

65

<210> 158

<211> 41

<212> PRT

<213> Homo sapiens

<400> 158

Met Met Thr Gly Glu Ala Arg Glu Ser Gln Ile Ala Leu Tyr Lys Gln
1 5 10 15

Arg Phe Arg Glu Phe Arg Glu Glu Gly Arg Thr Ile Tyr Lys Gly Arg
20 25 30

Trp Lys Arg Ser His Leu Ala Glu Gly

35 40

<210> 159

<211> 31

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (7)

<400> 159

Met Leu Glu Leu Gly Leu Xaa Pro Lys Leu Thr Ser Glu Tyr Arg Phe
1 5 10 15

Pro Pro Asn Cys Met Ile Leu His Ile Trp Ser Gln Leu Glu Val
20 25 30

<210> 160

<211> 75

<212> PRT

<213> Homo sapiens

<400> 160

Met Tyr Ile Tyr Ile Cys His His Phe Lys Asn Gln Ala Phe Lys Val
1 5 10 15

Lys Leu Ser Phe Pro His Ile Phe Phe His Ser Ile Phe Tyr Gln Tyr
20 25 30

Arg His Ser Leu Leu Leu Ser Phe Gln Phe Pro Ile Ile Ser Ser
35 40 45

His Pro Ile Phe Cys Ala Ser Ser Val Phe Lys Thr His Ser Pro Ser
50 55 60

Ala Ala Met Ala Pro Thr Ile Ile Phe Ile Thr
65 70 75

<210> 161

<211> 36

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (7)..(13)

<400> 161

Met Lys Arg Gly Asn Leu Xaa Xaa Xaa Xaa Xaa Xaa Gly Thr Pro
1 5 10 15

Cys Lys Asp Trp Ser His Thr Ala Met Ser Gln Glu Pro Pro Val Leu
20 25 30

Val Arg Val Leu
35

<210> 162
<211> 24
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (9)

<220>
<221> UNSURE
<222> (20)

<400> 162
Met Trp Ala Ala Trp Arg Arg Arg Xaa Asn Gly Phe Phe Pro Arg Ile
1 5 10 15

Pro Gly Lys Xaa Arg Gly Pro Asn
20

<210> 163
<211> 31
<212> PRT
<213> Homo sapiens

<400> 163
Met Cys His Ser Leu Tyr Arg Phe Leu Asn Cys His Ser Arg Tyr Tyr
1 5 10 15

Ile Val Tyr Thr Tyr Leu Thr Ile Phe Tyr Trp Cys His His Phe
20 25 30

<210> 164
<211> 134
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE

<222> (2) .. (22)

<220>

<221> UNSURE

<222> (39) .. (67)

<220>

<221> UNSURE

<222> (79) .. (113)

<400> 164

Met Xaa
1 5 10 15

Xaa Xaa Xaa Xaa Xaa Xaa Ala Gly Lys Arg Glu Asn Gln Lys Asp Ser
20 25 30

Ser Val Arg Arg Thr Trp Xaa
35 40 45

Xaa
50 55 60

Xaa Xaa Xaa Arg Phe Ser Pro Arg Ala Tyr Arg Lys Lys Val Xaa Xaa
65 70 75 80

Xaa
85 90 95

Xaa
100 105 110

Xaa Arg His Asn Arg Lys Leu Ile His Leu Ser Ser Lys Phe Leu Ile
115 120 125

Ile Asn Val Ile Ala Ser
130

<210> 165

<211> 51

<212> PRT

<213> Homo sapiens

<400> 165

Met Ser Lys Val Asp Leu Phe Ile Thr Asp Ser Phe Lys Lys Phe Asn
1 5 10 15

Gln Tyr Leu Leu Ala Thr Tyr Ser Thr Ser Gly Thr Gln Gly Ile Trp
20 25 30

Ser Thr Thr Met Lys Lys Arg Asp Trp Thr Leu Lys Glu His Arg Ser
35 40 45

Cys His Phe
50

<210> 166
<211> 60
<212> PRT
<213> Homo sapiens

<400> 166
Met Ser Asp Ser Arg Leu Cys Ser Cys Phe Leu His Thr Leu Ile Phe
1 5 10 15

Leu Asn Ile Ser Lys Ile Gln Ser Gly Ser Lys Ile Thr Cys Lys Asn
20 25 30

Ile Leu Ala Gln Glu Phe Asp Arg Leu Lys Ile Asn Tyr Leu Lys Tyr
35 40 45

Ile Lys Gln Glu Val Tyr Leu Leu Tyr Ser Met Tyr
50 55 60

<210> 167
<211> 15
<212> PRT
<213> Homo sapiens

<400> 167
Met Val Phe Gln Lys Thr Ser Leu Tyr Ser Asn Asn Ile Leu Leu
1 5 10 15

<210> 168
<211> 106
<212> PRT
<213> Homo sapiens

<400> 168
Cys Pro Ala Ala Tyr Thr Val Phe Leu Thr Arg Ile Ile Val Lys Tyr
1 5 10 15

Tyr Leu Asn Arg Gly Leu Phe Ser Glu Thr Pro Ser Asn Leu Lys Val
20 25 30

Glu Glu Lys Gly Trp Val Trp Trp Leu Met Pro Val Thr Pro Ala Leu
35 40 45

Trp Glu Ala Glu Ala Gly Gly Ser Leu Glu Leu Ser Leu Arg Pro Gly
50 55 60

Trp Ala Thr Pro Ser Leu Pro Lys Asn Thr Lys Met Ser Gln Ala Trp
65 70 75 80

Trp Cys Thr Pro Val Val Pro Ala Ala Leu Gly Ala Glu Val Gly Gly
85 90 95

Arg Leu Gly Pro Arg Arg Trp Arg Leu Gln
100 105

<210> 169

<211> 19

<212> PRT

<213> Homo sapiens

<400> 169

Met Gly Pro Asp Arg Leu Lys Gln Lys Ser Asn Thr Ala Val Val Ser
1 5 10 15

Arg Trp Ile

<210> 170

<211> 47

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (3) .. (4)

<220>

<221> UNSURE

<222> (13)

<220>

<221> UNSURE

<222> (16)

<400> 170

Met Asp Xaa Xaa Lys Trp Arg Met Arg Arg Gln Pro Xaa Ile Asn Xaa
1 5 10 15

Met Tyr Gln Thr Val Thr Ile Cys Glu Glu Tyr Cys Val Tyr Thr Asn
20 25 30

Arg Lys Gln Leu Lys Ala Phe Asn Met Cys Gly Trp Gly Glu Arg
35 40 45

<210> 171

<211> 197

<212> PRT

<213> Homo sapiens

<400> 171

Gln Glu Ala Gln Ile Met Lys Lys Leu Arg His Asp Lys Leu Val Pro
1 5 10 15

Leu Tyr Ala Val Val Ser Glu Glu Pro Ile Tyr Ile Val Thr Glu Phe
20 25 30

Met Ser Lys Gly Ala Tyr Ser Leu Ser Ile Arg Asp Trp Asp Glu Ile
35 40 45

Arg Gly Asp Asn Val Lys His Tyr Lys Ile Arg Lys Leu Asp Asn Gly
50 55 60

Gly Tyr Tyr Ile Thr Thr Arg Ala Gln Phe Asp Thr Leu Gln Lys Leu
65 70 75 80

Val Lys His Tyr Thr Glu His Ala Asp Gly Leu Cys His Lys Leu Thr
85 90 95

Thr Val Cys Pro Thr Val Lys Pro Gln Thr Gln Gly Leu Ala Lys Asp
100 105 110

Ala Trp Glu Ile Pro Arg Glu Ser Leu Arg Leu Glu Val Lys Leu Gly
115 120 125

Gln Gly Cys Phe Gly Glu Val Trp Met Gly Thr Trp Asn Gly Thr Thr
130 135 140

Lys Val Ala Ile Lys Thr Leu Lys Pro Gly Thr Met Met Pro Glu Ala
145 150 155 160

Phe Leu Gln Glu Ala Gln Ile Met Lys Lys Leu Arg His Asp Lys Leu
165 170 175

Val Pro Leu Tyr Ala Val Val Ser Glu Glu Pro Ile Tyr Ile Val Thr
180 185 190

Glu Phe Met Ser Lys
195

<210> 172

<211> 59

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (28) .. (49)

<400> 172

Met Cys Ile Met His Ile Asn Thr Phe Asn Leu Cys Asn His Leu Met
1 5 10 15

Arg Trp Leu Leu Leu Lys Ser Pro Leu Cys Thr Xaa Xaa Xaa Xaa Xaa
20 25 30

Xaa
35 40 45

Xaa Gln Lys Pro Lys Pro Thr Val His Gly Ile

50 55

<210> 173

<211> 56

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (14) .. (21)

<400> 173

Met Lys Pro Ile Arg Gln Leu Val Pro Phe Thr Leu Glu Xaa Xaa Xaa
1 5 10 15

Xaa Xaa Xaa Xaa Xaa Leu Tyr Leu Glu His Leu Thr Cys Arg Lys Arg
20 25 30

Arg Gly Lys Thr Phe Leu Gly Lys Arg Lys Ala Val Ala Val Pro Lys
35 40 45

Ser Lys His Phe Trp Gln Gly Phe
50 55

<210> 174
<211> 104
<212> PRT
<213> Homo sapiens

<400> 174
Met Leu Lys His Leu Gln Val Leu Asp Leu His Gln Cys Ser Leu Thr
1 5 10 15

Ala Asp Asp Val Met Ser Leu Thr Gln Val Ile Pro Leu Leu Ser Asn
20 25 30

Leu Gln Glu Leu Asp Leu Ser Ala Asn Lys Lys Met Gly Ser Ser Ser
35 40 45

Glu Asn Leu Leu Ser Arg Leu Arg Phe Leu Pro Ala Leu Lys Ser Leu
50 55 60

Val Ile Asn Asn Cys Ala Leu Glu Ser Glu Thr Phe Thr Ala Leu Ala
65 70 75 80

Glu Ala Ser Val His Leu Ser Ala Leu Glu Val Phe Asn Leu Ser Trp
85 90 95

Glu Gln Val Cys Trp Trp Ala Thr
100

<210> 175
<211> 490
<212> PRT
<213> Homo sapiens

<400> 175
Met Ser Gln Thr Arg Lys Lys Thr Ser Ser Glu Gly Glu Thr Lys Pro
1 5 10 15

Gln Thr Ser Thr Val Asn Lys Phe Leu Arg Gly Ser Asn Ala Glu Ser
20 25 30

Arg Lys Glu Asp Asn Asp Leu Lys Thr Ser Asp Ser Gln Pro Ser Asp
35 40 45

Trp Ile Gln Lys Thr Ala Thr Ser Glu Thr Ala Lys Pro Leu Ser Ser
50 55 60

Glu Met Glu Trp Arg Ser Ser Met Glu Lys Asn Glu His Phe Leu Gln
65 70 75 80

Lys Leu Gly Lys Lys Ala Val Asn Lys Cys Leu Asp Leu Asn Asn Cys
85 90 95

Gly Leu Thr Thr Ala Asp Met Lys Glu Met Gly Glu Ala Phe Glu Met
100 105 110

Ile Pro Glu Leu Glu Leu Asn Leu Ser Trp Asn Ser Lys Val Gly
115 120 125

Gly Asn Leu Pro Leu Ile Leu Gln Lys Phe Gln Lys Gly Ser Lys Ile
130 135 140

Gln Met Ile Glu Leu Val Ala Cys Ser Leu Thr Ser Glu Asp Gly Thr
145 150 155 160

Phe Leu Gly Gln Leu Leu Pro Met Leu Gln Ser Leu Glu Val Leu Asp
165 170 175

Leu Ser Ile Asn Arg Asp Ile Val Gly Ser Leu Asn Ser Ile Ala Gln
180 185 190

Gly Leu Lys Ser Thr Ser Asn Leu Lys Val Leu Lys Leu His Ser Cys
195 200 205

Gly Leu Ser Gln Lys Ser Val Lys Ile Leu Asp Ala Ala Phe Arg Tyr
210 215 220

Leu Gly Glu Leu Arg Lys Leu Asp Leu Ser Cys Asn Lys Asp Leu Gly
225 230 235 240

Gly Gly Phe Glu Asp Ser Pro Ala Gln Leu Val Met Leu Lys His Leu
245 250 255

Gln Val Leu Asp Leu His Gln Cys Ser Leu Thr Ala Asp Asp Val Met
260 265 270

Ser Leu Thr Gln Val Ile Pro Leu Leu Ser Asn Leu Gln Glu Leu Asp
275 280 285

Leu Ser Ala Asn Lys Lys Met Gly Ser Ser Ser Glu Asn Leu Leu Ser
290 295 300

Arg Leu Arg Phe Leu Pro Ala Leu Lys Ser Leu Val Ile Asn Asn Cys
305 310 315 320

Ala Leu Glu Ser Glu Thr Phe Thr Ala Leu Ala Glu Ala Ser Val His
325 330 335

Leu Ser Ala Leu Glu Val Phe Asn Leu Ser Trp Asn Lys Cys Val Gly
340 345 350

Gly Asn Leu Lys Leu Leu Leu Glu Thr Leu Lys Leu Ser Met Ser Leu
355 360 365

Gln Val Leu Arg Leu Ser Ser Cys Ser Leu Val Thr Glu Asp Val Ala
370 375 380

Leu Leu Ala Ser Val Ile Gln Thr Gly His Leu Ala Lys Leu Gln Lys
385 390 395 400

Leu Asp Leu Ser Tyr Asn Asp Ser Ile Cys Asp Ala Gly Trp Thr Met
405 410 415

Phe Cys Gln Asn Val Arg Phe Leu Lys Glu Leu Ile Glu Leu Asp Ile
420 425 430

Ser Leu Arg Pro Ser Asn Phe Arg Asp Cys Gly Gln Trp Phe Arg His
435 440 445

Leu Leu Tyr Ala Val Thr Lys Leu Pro Gln Ile Thr Glu Ile Gly Met
450 455 460

Lys Arg Trp Ile Leu Pro Ala Ser Gln Glu Glu Leu Glu Cys Phe
465 470 475 480

Asp Gln Asp Lys Lys Lys Lys His Ser Leu
485 490

<210> 176
<211> 136
<212> PRT
<213> Homo sapiens

<400> 176
Met His Leu Leu Ser Asp Gly Lys Glu Gly Ser Thr Tyr Lys Pro Phe
1 5 10 15

Gln Glu Ile Ser Ser Ser Lys Ser Gly Arg Lys Gly Ser Lys Ala
20 25 30

Thr Ile Ser Phe Met Ser Ala Val Val Asn Pro Gln Leu Phe Lys Ser
35 40 45

Arg His Leu Leu Thr Ala Phe Leu Pro Ser Phe Cys Arg Lys Cys Ser
50 55 60

Phe Phe Ser Ile Leu Asp Leu His Ser Ile Ser Glu Leu Arg Gly Leu
65 70 75 80

Ala Val Ser Glu Val Ala Val Phe Cys Ile Gln Ser Leu Gly Trp Glu
85 90 95

Ser Leu Val Leu Arg Ser Leu Ser Ser Phe Leu Leu Ser Ala Leu Glu
100 105 110

Pro Leu Arg Asn Leu Leu Thr Val Glu Val Trp Gly Leu Val Ser Pro
115 120 125

Ser Glu Glu Val Phe Phe Leu Val
130 135